



Consumer Solutions

XIAMETER™ Silicone Modifiers

Modifier Selection Guide

XIAMETER™ Silicone Modifiers are a range of products which improve various aspects of performance when compounded with either silicone rubber bases or fluorosilicone rubber bases.

Specific details of these products are shown in the typical properties table on the next page.

How to Use

The addition of XIAMETER Silicone Modifiers is generally easily done on two-roll mills. The exact levels of modifier should be determined by the fabricator for each application.

Flame Retardants

The XIAMETER™ RBM series of flame retardant additives can be used with most silicone rubber bases and compounds. In general, oven post cure improves the flame retardant performance of XIAMETER™ RBM-9000 Rubber Additive, XIAMETER™ RBM-9005 Modifier and XIAMETER™ RBM-9006 Modifier. Pigments containing cadmium or lead will destroy the flame retardancy.

Handling Agents

XIAMETER™ RBM-9001 Modifier is used to retard crepe aging and softens unvulcanized silicone rubber bases. XIAMETER RBM-9001 Modifier is added before the addition of reinforcing fillers. Thorough cross blending on the mill is recommended to insure uniformity.

XIAMETER™ RBM-9003 Modifier is used to improve processability during extrusion, calendaring and hot air vulcanization. XIAMETER RBM-9003 Modifier should be added after the addition of all fillers and additives but before the addition of peroxides.

Mold Release Additive

XIAMETER™ RBM-9010 Rubber Additive improves the mold release of vulcanized silicone rubber. It may not eliminate the need for mold release agents but it will greatly reduce the frequency of spraying and excess agent build up. Higher levels of XIAMETER RBM-9010 Modifier may adversely affect compression set or other properties.

Heat Stability Improvement

XIAMETER™ RBM-9002 Rubber Additive improves the heat stability of vulcanized silicone rubber. It is easily added on a two-roll mill prior to vulcanization.

Acidic By-Product Neutralizers

XIAMETER™ RBM-2600 Masterbatch is easily dispersible. Lower levels are recommended to avoid possible impact on dry heat stability.

XIAMETER™
silicones simplified by 

Typical Properties

Specification writers: These values are not intended for use in preparing specifications. Please contact your local XIAMETER sales representative or visit www.xiameter.com prior to writing specifications on this product.

Modifier	Description	Color	Specific Gravity	Use Level	Performance Enhancement	Food Grade*	
XIAMETER™ RBM-9000 Rubber Additive	Flame retardant	White	1.8	2.0-20	Pigmentable flame retardant. Can be used to make UL94 and UL62 rated compounds	No	No
XIAMETER™ RBM-9005 Modifier	Flame retardant	Blue/black	1.77	2.0-14	Most effective flame retardant. Can be used to make UL94 and UL62 rated compounds, non-pigmentable	No	No
XIAMETER™ RBM-9006 Modifier	Flame retardant	Off white	1.64	2.0-20	Pigmentable flame retardant. Can be used to make UL94 and UL62 rated compounds, 1.5phr red iron oxide enhances flame retardancy	No	No
XIAMETER™ RBM-9001 Modifier	Handling additive	Translucent	1.07	0.5-5.0	Used to retard crepe aging and soften unvulcanized stocks	Yes	Yes
XIAMETER™ RBM-9003 Modifier	Handling additive	White	1.2	0.1-1.5	Increases green strength and plasticity. Increases processability during extrusion, calendaring and hot air vulcanization	No	No
XIAMETER™ RBM-9010 Modifier	Mold release additive	Off white	1.1	0.2-1.0	Improves mold release	Yes	Yes
XIAMETER™ RBM-9002 Rubber Additive	Heat stability additive	Light tan	1.61	0.5-2.0	Improves heat stability; pigmentable	No	No
XIAMETER™ RBM-2600 Masterbatch	Anti bloom additive	Off white	1.25	0.3-20	Reduces peroxide bloom; improves steam and oil resistance. Not available in Americas	Yes	Yes

* Formulated to meet FDA 21 CFR 177.2600 or BGVV, XV.

Contact Us

Visit www.xiameter.com to learn more about the many product options available to you from XIAMETER™.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

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